a first conductivity type first semiconductor layer;

a first conductivity type second semiconductor layer disposed on said first conductivity type first semiconductor layer; and

a second conductivity type semiconductor layer formed at a surface layer portion of said first conductivity type second semiconductor layer;

wherein said first conductivity type first semiconductor layer comprises a surface impurity concentration greater than that of said first conductivity type second semiconductor layer; and

wherein an end face of a depletion layer on a side of said first conductivity type first semiconductor layer and a surface layer of said first conductivity type first semiconductor layer are within no more than a predetermined distance when inverse biases are applied to said first conductivity type second semiconductor layer and said second conductivity type semiconductor layer, such that a sensitivity of said photo diode to light of a first wavelength and a sensitivity of light of a second wavelength, which is different from said first wavelength, are made substantially the same.

3. (Amended) A semiconductor device as set forth in claim 1, wherein said depletion layer is designed to spread in a region including a region 3 to 6 μm in a depth direction from a surface of said second conductivity type semiconductor layer.

4. (Amended) A semiconductor device as set forth in claim 1, wherein said depletion layer is designed to spread in a region including a region 2 to 7 μm in a depth direction from a surface of said second conductivity type semiconductor layer.

6. (Amended) A semiconductor device as set forth in claim 1, wherein said first conductivity

type first semiconductor layer is a first conductivity type substrate, and said surface impurity concentration of the first conductivity type substrate is at least $1x10^{17}/cm^3$.

7. (Amended) A semiconductor device as set forth in claim 1, wherein said predetermined distance is 3 μm.

8. (Amended) A semiconductor device as set forth in claim 1, wherein said first wavelength is 780 nm and said second wavelength is 650 nm.

IN THE ABSTRACT OF THE DISCLOSURE:

The present Abstract of the Disclosure was deleted and replaced with the following new Abstract of the Disclosure:

A semiconductor device having a photo diode which has substantially the same sensitivity to a plurality of light having different wavelengths, includes a first and a second conductivity type semiconductor layer formed at a surface layer portion of the first conductivity type semiconductor layer, wherein the sensitivity to light of a first wavelength and a second wavelength which is different from the first wavelength, are made substantially the same by designing a region in which a depletion layer spreads from a junction of the first and second conductivity type semiconductor layers and when an inverse bias is applied to the first and second conductivity type semiconductor layers, for example, by designing it to spread in a region of 3 to 6 μm or a region of 2 to 7 μm from the surface of the second conductivity type semiconductor layer in the depth direction.